Application/Control Number: 10/807,547 Page 2

Art Unit: 2616

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or
additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR.
 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the
payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Dov Rosenfeld (Reg. No. 38,687) on 10 April 2008.

The application has been amended as follows:

- In claim 1, lines 12-13, "channel correct the modulated subcarriers of the
 received signal for the respective channel of each of the subcarriers" has been
 changed to "channel correct the modulated subcarriers of the received signal".
- In claim 7, lines 3-4, "by wherein the decision circuit produces re-encoded decoded decisions, including carrying" has been changed to "by carrying".
- In claim 28, line 10, "each received packets" has been changed to "the received packet".
- 2. The amendment to claim 1 removes the ambiguity created by the claim, which suggested that the respective channel of each of the subcarriers contained modulated subcarriers of the received signal; the amendment to claim 7 eliminates duplicative language in the claim; and the amendment to claim 28 corrects grammatical problems and provides clear antecedent basis for the term "the received packet".
- Claims 1-35 are allowed. The prior art does not disclose or fairly suggest forming channel corrected constellation values, forming post-decision constellation values corresponding

to the channel corrected constellation values, forming a measure of the channel drift using the post-decision constellation values and the constellation values prior to the post-decision values being formed, and updating a function of a channel response using a weighted sum of a pre-update function and a quantity determined from the pre-update function and the measure of channel drift.

- 4. Claims 36-51 are allowed. The prior art does not disclose or fairly suggest re-modulating a decision made using a pre-decision constellation point value to form a post-decision constellation point value, forming a complex valued product of the function of a first estimate for a subcarrier and the complex-valued ratio of the pre-decision and post-decision values, and updating the stored value of the first estimate with a weighted amount of the formed complex valued product.
- 5. Moose discloses forming an initial channel estimation using a preamble and then updating this initial channel estimation using pilot tone information. US 2002/0065047, ¶¶ [0035]-[0036] and [0039]. To do this, Moose obtains the phase change of each pilot using each OFDM symbol output from the FFT and the known transmitted pilot tone phases. *Id.* at ¶ [0043].
- Onizawa et al. discloses smoothing channel attenuation between subcarriers by comparing a receive vector signal of each subcarrier with a reference transmit vector signal to obtain the attenuation of each subcarrier. USPN 6,608,863, c. 4, II. 11-40.
- Magee et al. discloses providing weighted constellation points, where the weighting is used to identify data integrity and/or data reliability. USPN 7,023,931, c. 6, II. 23-41.

Application/Control Number: 10/807,547

Art Unit: 2616

Belotserkovsky et al. discloses using pilots from a fast Fourier transformed and equalized
 OFDM signal to derive an FFT window adjustment factor to counter FFT window drift. USPN
 6,650,617, c. 2, 1, 63-c. 3, 1, 3.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANIEL J. RYMAN whose telephone number is (571)272-3152. The examiner can normally be reached on Mon.-Fri. 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn Feild can be reached on (571)272-2092. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Art Unit: 2616

Primary Examiner Art Unit 2616

/Daniel J. Ryman/ Primary Examiner, Art Unit 2616